Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 5: System

PE 0604366N / Standard Missile Improvements

Development & Demonstration (SDD)

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	2,078.458	46.965	67.082	53.198	-	53.198	67.682	58.710	41.904	14.268	Continuing	Continuing
0439: Standard Missile Improvement	1,067.876	23.725	26.716	11.814	-	11.814	19.781	11.855	12.127	12.444	Continuing	Continuing
3092: Standard Missile 6 Program	1,010.582	23.240	40.366	41.384	-	41.384	47.901	46.855	29.777	1.824	Continuing	Continuing

MDAP/MAIS Code:

Other MDAP/MAIS Code(s): 197, 391

A. Mission Description and Budget Item Justification

Standard Missile (SM) is the Navy's premier Anti-Air Warfare (AAW) missile, providing both area air defense for the fleet and self defense for individual AEGIS CGs and DDGs, as required by the Joint Theater Air Missile Defense (TAMD), Mission Need Statement (MNS), Defense Planning Guidance (DPG), Quadrennial Defense Review (QDR), and Ship Class AAW Self Defense Capstone Requirements Document. Agility, fuzing, and computer modifications to SM are in development to restore performance in the near term against a specific existing proliferating Anti-Ship Cruise Missile (ASCM) threat. Continuous analysis of missile capabilities vs. ever-evolving and proliferating aircraft and ASCM threats and long-range planning are required to keep pace with the threat.

Modifications to SM-2 BLK IIIA are required for use on DDG-1000 class destroyers. The Joint Universal Waveform Link (JUWL) will be integrated with the Evolved Seasparrow Missile (ESSM) and Standard Missile to communicate with the DDG-1000 SPY-3 radar. SM-2 missile software will be updated with interrupted continuous wave illumination (ICWI) in order to allow operation with DDG-1000.

Missile integration with Air and Missile Defense S-band Radar (AMDR-S) radar for DDG 51 Flight III ships will include requirements review/updates and analysis, verification, technical documentation, design review, working group SME support, missile/radar integration, missile test hardware procurement, risk assessment, safety, test and evaluation planning, analysis, data collection. Missile variants: ESSM Block I; SM-2 Blk IIIB MU2, SM-6 Block I (Current Aegis Configuration).

The SM-6 missile system will leverage the Navy investment in the AEGIS Weapon System (AWS), Cooperative Engagement Capability (CEC), and airborne early warning systems, which will be upgraded in concert with missile development to support a fully integrated extended range detect-to-engage naval and joint integrated fire control capability. Together, this family of systems will provide the air superiority and the umbrella of protection against the full spectrum of projected future cruise missile (anti-ship and land attack) and manned aircraft threats discussed in the Joint TAMD MNS, DPG, QDR, Integrated Air and Missile Defense (IAMD) Roadmap, IAMD Joint Integrating Concept, IAMD Joint Operating Concept and TAMD Capstone Requirements Document. SM-6 FOT&E Testing with AEGIS Baseline 9 commences in the second quarter of FY14 and scheduled events align with the overall AEGIS Baseline 9 Path to Operational Testing (OT).

PE 0604366N: Standard Missile Improvements

Navy

UNCLASSIFIED
Page 1 of 19

[#] The FY 2015 OCO Request will be submitted at a later date.

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy

Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 5: System Development & Demonstration (SDD)

PE 0604366N / Standard Missile Improvements

SM-6 portion of Joint and Naval Integrated Fire Control is to support the integration, land-based and at-sea test, and analysis in support of the Naval Integrated Fire Control-Counter Air (NIFC-CA) test and evaluation strategy. The first at-sea NIFC-CA System of Systems (SoS) live fire at-sea test with AEGIS Baseline 9 commenced in the 4th Quarter of FY13 with subsequent Land-Based and At-Sea tests taking place in FY14.

Insensitive Munitions (IM) efforts support transition of technology associated with ONR HARDKILL future naval capabilities reflected in a signed, level B, Technology Transition Agreement (TTA), endorsed by PEO IWS 3.0, OPNAV N96C, Office of Naval Research (ONR) and Missile Defense Agency (MDA AX).

Portable All-Up Round Bit Tester (PABTs) eliminates the need for missiles to be removed from the ship and transported to the Intermediate Level Maintenance Facility (ILMF) to undergo testing, reprogramming, and maintenance checks. PABTs development and subsequent delivery in FY16 will increase missile/asset availability to the fleet and result in significant maintenance savings over the SM-6 lifecycle.

Future capability demonstration project funded by the OSD Deputy's Management Action Group (DMAG), with DEPSECDEF approval, for the execution of test vehicle tests at White Sands Missile Range to support an at sea demonstration event in FY16. The at sea demonstration event supports data collections, performance analysis tasks, reliability assessment, Preliminary Design Review (PDR) for AEGIS Baseline Changes (ACB), and Combat Systems Integration Test (CSIT). The preliminary integration testing of the entire architecture interfaces missile, data network, AEGIS, and airborne sensors to support the fielding of an operational capability in the FY18 timeframe.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	63.891	75.592	80.042	-	80.042
Current President's Budget	46.965	67.082	53.198	-	53.198
Total Adjustments	-16.926	-8.510	-26.844	-	-26.844
Congressional General Reductions	-	-0.010			
 Congressional Directed Reductions 	-	-8.500			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	4.058	-			
 SBIR/STTR Transfer 	-1.362	-			
 Program Adjustments 	-	-	-24.400	-	-24.400
 Rate/Misc Adjustments 	-0.001	-	-2.444	-	-2.444
 Congressional General Reductions 	-4.121	-	-	-	-
Adjustments					
 Congressional Directed Reductions 	-15.500	-	-	-	-
Adjustments					

PE 0604366N: Standard Missile Improvements

Navy

UNCLASSIFIED
Page 2 of 19

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0604366N / Standard Missile Improvements	
Change Summary Explanation Congressional reduction in FY 14 for future capabilities demonstration of an operational capability in the FY18 timeframe. IM funding was re-		

PE 0604366N: Standard Missile Improvements Navy

Page 3 of 19

Exhibit R-2A, RDT&E Project Ju	stification:	PB 2015 N	lavy							Date: Marc	ch 2014	
Appropriation/Budget Activity 1319 / 5					_	am Elemen 66N / Standa ents	•			umber/Nar ndard Missi	ne) le Improven	nent
COST (\$ in Millions)	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost			
0439: Standard Missile Improvement	1,067.876	23.725	26.716	11.814	-	11.814	19.781	11.855	12.127	12.444	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		
MDAP/MAIS Code: 197									*			

^{*} The FY 2015 OCO Request will be submitted at a later date.

R Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

A. Mission Description and Budget Item Justification

Modifications to SM-2 BLK IIIA are required for use on DDG-1000 class destroyers. The JUWL will be integrated with the ESSM and Standard Missile to communicate with the DDG-1000 SPY-3 radar. SM-2 missile software will be updated with Interrupted Continuous Wave Illumination (ICWI) in order to allow operation with DDG-1000.

Missile integration with AMDR-S radar for DDG 51 Flight III ships will include requirements review/updates and analysis, verification; technical documentation, design review and working group SME support, missile/radar integration, missile test hardware procurement, risk assessment, safety, test and evaluation planning, analysis, data collection. Deliverables include interface specs and engineering documents to support AMDR PDRs HW&SW (FY13) and CDRs HW&SW (FY14); EDM testing (FY15), interface specs and engineering documents to support AMDR/ACBNext for DDG 51 Flight III E3 Testing, Analysis and Reports. Missile variants: ESSM Block I; SM-2 Blk IIIB MU2, SM-6 Block I (Current Aegis Configuration)

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: DDG-1000 Pre Plan Product Improvement (P3I) Link Integration/ICWI	19.891	12.706	8.825
Articles:	-	-	-
FY 2013 Accomplishments: Conducted ESSM PRM qualification testing and EMI/E3 testing; Conducted SM-2 POD Plate 3 DVT; Completed SM-2 JUWL Preliminary Design Review in July 2013; Procured and assemble SM-2 Production Representative Model (PRM) modules and conduct associated qualification testing.			
FY 2014 Plans: Complete ESSM E3 testing. Deliver ESSM inert operational missile (IOM) to DDG 1000 for ship interface checkout and integration testing; Conduct SM-2 Plate 3 qualification testing; Conduct SM-2 JUWL Critical Design Review in 3rd quarter 2014; Assemble/integrate SM-2 modules and software into a functional missile guidance section.			
FY 2015 Plans:			
Conduct SM guidance and round level qualification testing and EMI/E3 testing. Deliver PRM IOM to DDG 1000.			
Title: DDG 1000 Rephase	2.799	-	-

PE 0604366N: Standard Missile Improvements

Page 4 of 19

R-1 Line #108

Navy

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Exhibit R-2A, RDT&E Project Justi	fication: PB	2015 Navy							Date: M	arch 2014	
Appropriation/Budget Activity 1319 / 5				PE 06		ment (Numb andard Miss			t (Number/N Standard Mis	l ame) ssile Improve	ment
3. Accomplishments/Planned Prog	grams (\$ in N	Millions, Art	ticle Quanti	ties in Each)	1				FY 2013	FY 2014	FY 2015
							A	Articles:	-	-	-
FY 2013 Accomplishments: Procured test round modification kits canisters) for developmental testing		Block IIIAs to	o Zumwalt III	As, test, and	deliver Zun	nwalt IIIA rou	ınds (includi	ng			
FY 2014 Plans: N/A											
FY 2015 Plans: N/A											
<i>Title:</i> Air and Missile Defense Radar	(AMDR) Inte	gration					A	Articles:	1.035	14.010 -	2.989
FY 2013 Accomplishments: AMDR Specifications requirements re Supported AMDR prime design revie							missile ICD	es;			
FY 2014 Plans: Hardware (IOM/Spare parts) procure radar prime contractor, facilitate desi of new radar in natural and threat RF	gn that comp	lies with exi	sting interfac	ces (includino	NIFĆ-CA):						
FY 2015 Plans: Complete ESSM missile test hardwadetailed requirements development felements as available; generating midesign and program review support versions.	or ACB Next issile fly out d	and integra	tion with AM iring missile	DR; updatino communicati	g missile mo on test set f	dels with AM or radar risk	IDR and CS				
				Accon	nplishment	s/Planned P	rograms Su	ubtotals	23.725	26.716	11.814
C. Other Program Funding Summa	ıry (\$ in Milli	ons)									
	• .	,	FY 2015	FY 2015	FY 2015					Cost To	='
Line Item	FY 2013	FY 2014	<u>Base</u>	<u>000</u>	<u>Total</u>	FY 2016	FY 2017	FY 201	8 FY 2019	<u>Complete</u>	
• WPN 2356: Standard Missile Remarks	-	-	-	=	-	16.600	-	-	-	-	16.600

PE 0604366N: Standard Missile Improvements

Navy

UNCLASSIFIED
Page 5 of 19

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 5	PE 0604366N / Standard Missile	0439 / Sta	ndard Missile Improvement
	Improvements		

D. Acquisition Strategy

Production representative missiles will be built for ESSM between FY12 and 14 and for SM-2 FY13 and FY17.

Engineering and integration testing for ESSM in FY14- FY15 and SM-2 in FY14- FY15. 67 ESSM missiles and 34 SM missiles are required to support Developmental Test & Operational Test (DT & OT) FY15-FY17 and continue follow-on ship integration and design update effort in FY18.

This budget reflects the procurement of the initial SM Flight Test Rounds (FTRs) in FY13. Follow-on SM/ESSM FTRs, missile integration and test efforts and ship fill records are not funded within this budget. The 67 ESSM and 27 SM missiles are to be funded by PMS 500.

SM Development, integration, and test is expected to conclude by FY18 for the X-band JUWL and ICWI.

E. Performance Metrics

ESSM initial engineering design for X-Band JUWL capability was completed and Engineering Development Models (EDMs) were built and tested.

ESSM ordered material/parts and assembled proof of design units. Design verification tests are complete (FY12).

ESSM conducted its Critical Design Review (CDR) in April 2012 (FY12).

JUWL conducted its SM-2 PDR during fourth quarter FY13.

SM-2 integration testing and datalink qualification for JUWL testing is planned for FY14.

PE 0604366N: Standard Missile Improvements

Navy

Page 6 of 19

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name)

PE 0604366N / Standard Missile

Improvements

Project (Number/Name)

0439 I Standard Missile Improvement

Date: March 2014

Product Developme	nt (\$ in M	illions)		FY 2	2013	FY 2	2014		2015 ase		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Design and Analysis1	SS/CPAF	RAYTHEON : Tucson, AZ	234.986	20.120	May 2013	23.818	Mar 2014	9.552	Nov 2014	-		9.552	Continuing	Continuing	Continuin
Design and Analysis2	C/CPFF	JHU/APL : Laurel, MD	4.701	1.605	Nov 2012	1.500	Mar 2014	0.310	Nov 2014	-		0.310	-	8.116	-
Design and Analysis3	MIPR	MIT/Lin Lab : Lexington, MA	0.050	-		-		-		-		-	-	0.050	-
Design and Analysis4	WR	NSWC : Dahlgren	787.984	0.363	Nov 2012	0.320	Mar 2014	0.601	Nov 2014	-		0.601	-	789.268	-
Design and Analysis5	WR	NSWC : Indian Head	0.940	-		-		-		-		-	-	0.940	-
Design and Analysis6	WR	NAWC : China Lake	3.180	0.475	Nov 2012	0.570	Mar 2014	0.474	Nov 2014	-		0.474	-	4.699	-
Design and Analysis7	Various	LOCKHEED MARTIN : Moorestown, NJ	17.775	-		-		-		-		-	-	17.775	-
Design and Analysis8	WR	CNO : Washington, DC	0.010	-		-		-		-		-	-	0.010	-
Design and Analysis9	WR	CMDP : Phoenix, AZ	4.795	-		-		-		-		-	-	4.795	-
Design and Analysis11	WR	NSWC : Crane	0.257	-		-		-		-		-	-	0.257	-
Design and Analysis12	WR	DOI&CNAP : Washington, DC	0.487	-		-		-		-		-	-	0.487	-
Design and Analysis13	WR	COMPTEVFOR : Norfolk, VA	0.100	-		-		-		-		-	-	0.100	-
Design and Analysis14	C/CPFF	LOCKHEED MARTIN : Moorestown, NJ	2.000	-		-		-		-		-	-	2.000	-
Design and Analysis15	WR	CARDEROCK : Bethesda, MD	0.050	-		-		-		-		-	-	0.050	-
Design and Analysis16	WR	NWAS : Corona	0.325	0.060	Jul 2013	-		0.351	Nov 2014	-		0.351	-	0.736	-
Design and Analysis17	C/CPFF	CORVID : Mooresville, NC	0.100	-		-		-		-		-	-	0.100	-
Design and Analysis18	C/CPFF	BAE : Rockville, MD	0.101	-		0.030	Mar 2014	0.041	Nov 2014	-		0.041	-	0.172	-
Design and Analysis19	MIPR	MDA : Dahlgren,VA	1.257	-		-		-		-		-	-	1.257	_

PE 0604366N: Standard Missile Improvements Navy

UNCLASSIFIED
Page 7 of 19

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name)

PE 0604366N / Standard Missile

Improvements

Project (Number/Name)

0439 I Standard Missile Improvement

Date: March 2014

Product Developme	ent (\$ in M	illions)		FY 2	2013	FY 2	2014	FY 2 Ba		FY 2		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Design and Analysis20	WR	IWS3D : ARLINGTON, VA	1.000	0.500	Nov 2012	-		-		-		-	-	1.500	-
		Subtotal	1,060.098	23.123		26.238		11.329		-		11.329	-	-	-

Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY 2	2014	FY 2 Ba	2015 ise		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
DEVELOPMENTAL TEST & EVALUATION1	WR	NSWC : Port Hueneme	0.185	-		-		-		-		-	-	0.185	-
DEVELOPMENTAL TEST & EVALUATION2	WR	WSMR : New Mexico	1.600	-		-		-		-		-	-	1.600	-
DEVELOPMENTAL TEST & EVALUATION3	WR	NAWC : Pt Mugu	0.098	-		-		-		-		-	-	0.098	-
DEVELOPMENTAL TEST & EVALUATION4	WR	PMRF : Hawaii	0.338	-		-		-		-		-	-	0.338	-
DEVELOPMENTAL TEST & EVALUATION5	WR	NSWC : PHD/ Techrep	0.567	-		-		-		-		-	-	0.567	-
	•	Subtotal	2.788	-		-		-		-		-	-	2.788	-

Management Servic	es (\$ in M	illions)		FY 2	2013	FY 2	2014	FY 2 Ba	2015 ise	FY 2		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
CONTRACTOR ENGINEERING SUPPORT	C/CPAF	VARIOUS : VARIOUS	2.630	-		-		-		-		-	-	2.630	-
PROGRAM MANAGEMENT SUPPORT	C/CPAF	VARIOUS : VARIOUS	2.294	0.537	Nov 2012	0.415	Mar 2014	0.423	Nov 2014	-		0.423	-	3.669	-
TRAVEL	Allot	IWS3 : Arlington, VA	0.066	0.065	Nov 2012	0.063	Mar 2014	0.062	Nov 2014	-		0.062	-	0.256	-

PE 0604366N: Standard Missile Improvements

Navy

UNCLASSIFIED Page 8 of 19

Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2015 Navy	/								Date:	March 20	14	
Appropriation/Budge 1319 / 5	et Activity	1					4366N / S	ement (N Standard i		ame)		: (Numbe : Standard	r/ Name) Missile Im _l	proveme	nt
Management Service	es (\$ in M	illions)		FY 2	013	FY 2	2014	FY 2 Ba	2015 ise		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	4.990	0.602		0.478		0.485		-		0.485	-	6.555	-
			Prior Years	FY 2	013	FY 2	2014	1	2015 ise		2015 CO	FY 2015 Total	Cost To	Total Cost	Target Value of Contract
	Project Cost Totals 1,067.876					26.716	716 11.814 -			-		11.814	-	-	-

Remarks

PE 0604366N: Standard Missile Improvements Navy

Page 9 of 19

ibit R-4, RDT&E Schedu ropriation/Budget Activ		file:	PB 2	015	Navy	<u>'</u>										(Nun		/Nam	ie)			t (Nu	mbe	r/Na				
9/5												prove			anua	rd Mi	ssiie			04,	397	Stant	ara	IVIISS	ile Im	prov	emei	π
Fisical Year		2013	3			20	114			2	15			2	016			20	17			20	18			2	019	
	1	2	3	4	1	2	3	4	1	2	3	3 4	1	2	3	4	1	2	ø	4	1	2	3	з .	1	2	2 :	3
Acquisition Milestones																8 ∨												
Design Reviews/Decisions			PDR	\	555		SRB A COR			888	A A	SESRE		555	A A	ESRB												
Generate Flyvout Tables/Missile Models									MDR		L																	
Integration & Test										and	Roun Testir	9	EM	Test//	Analysis	and U	plink/D	ownlin	verifica	etion								
FlightTests			+								JU	wl 														<u> </u> 		\vdash
Land Based Testing							∆ wieto	:														AME	DR.	 T	 		 T	
Test & Evaluation Milestones										s	DTS FIRI										1 (2) 1 (2)							
AT-SEA										INC) FIRI	\triangle	B3															
Production Milestones										<u> </u> 								<u> </u> 										\vdash
Inert Operational Missile Procureme	nt					ЮМ					K	OM Del	ivery															
								EXHIBIT SCHED			LE																	

PE 0604366N: Standard Missile Improvements Navy

Exhibit R-2A, RDT&E Project Ju	stification:	PB 2015 N	lavy							Date: Marc	ch 2014	
Appropriation/Budget Activity 1319 / 5					_	am Elemen 66N / Standa ents	•	Name)	Project (N 3092 / Star		ne) le 6 Progran	n
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
3092: Standard Missile 6 Program	1,010.582	23.240	40.366	41.384	-	41.384	47.901	46.855	29.777	1.824	Continuing	Continuing
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-		

MDAP/MAIS Code: 391

A. Mission Description and Budget Item Justification

This program leverages existing missile technology and advanced missile technology. It aligns missile technology roadmaps across the services (NAVSEA, NAVAIR, USAF, USMC and USA) and missile variants within the services, taking advantage of the Navy's investment in the AWS, CEC, and airborne early warning systems. This missile will provide an extended range engagement capability to provide the air superiority and the umbrella of protection for joint U.S. forces and allies against the full spectrum of manned-fixed and rotary-wing aircraft, unmanned aerial vehicles, and land attack and anti-ship cruise missiles in flight, thereby contributing to the continuous protection of forward deployed ground maneuver forces as well as theater rear assets as discussed in the Joint TAMD MNS, DPG, QDR, TAMD Capstone Requirements Document, Forward From the Sea, Joint Vision 2010/2020, the 2002/2003 Naval Transformational Roadmap, the Operational Requirements Document for SM-6 BLK 1, and the SM-6 Capability Production Document.

SM-6 portion of Joint and Naval Integrated Fire Control is to support the integration, land-based and at-sea test, and analysis in support of the NIFC-CA test and evaluation strategy. The JROC directed Joint Land Attack Elevated Netted Sensor (JLENS) integration into the NIFC-CA kill chain was successfully live fire tested as well as the first land-based NIFC-CA SoS live fire test. The first at-sea NIFC-CA SoS live fire at-sea test with AEGIS Baseline 9 commences in the 4th Quarter of FY13 with subsequent Land-Based and At-Sea tests taking place in FY14.

IM efforts support transition of technology associated with ONR HARDKILL Future Naval Capabilities reflected in a signed, level B, TTA, endorsed by PEO IWS 3.0, OPNAV N96C, ONR and MDA AX.

PABTs eliminates the need for missiles to be removed from the ship and transported to the ILMF to undergo testing, reprogramming, and maintenance checks. PABTs development and subsequent delivery in FY16 will increase missile/asset availability to the fleet and result in significant maintenance savings over the SM-6 lifecycle.

Future capabilities demonstration project supports SM demonstrations, captive flight tests, data collection and analysis tasks.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: SM 6 Missile Development/Improvement	10.273	-	-
Articles:	-	-	-
FY 2013 Accomplishments:			

PE 0604366N: Standard Missile Improvements

Page 11 of 19

R-1 Line #108

Navy

[#] The FY 2015 OCO Request will be submitted at a later date.

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: M	larch 2014	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604366N / Standard Missile Improvements		t (Number/N Standard Mi	lame) ssile 6 Progra	am
B. Accomplishments/Planned Programs (\$ in Millions, Article C	Quantities in Each)		FY 2013	FY 2014	FY 2015
Supported follow on test and evaluation (FOT&E); ACB 12 B/L 9 int (PRP) flight test and analysis.	tegration and flight test; and Processor Replacement Pro	gram			
FY 2014 Plans: N/A					
FY 2015 Plans: N/A					
Title: Insensitive Munitions (IM)	Ai	ticles:	3.195 -	4.114 -	1.00
FY 2013 Accomplishments: Active Mitigation (AM) Plan was rebaselined IAW reduced budget to AM Technologies. Electronic Arm & Fire Device (EAFD) improvem Device (ISD) approach, leveraging several AM vendors, proposed a testing was deferred. Fuze and Initiation System Technical Review Board (WSESRB) technical briefs are planned. The bi-annual IM P	ents (MIL-STD-1901A) were addressed via an Ignition S and led by the prime contractor. Full-scale, static rocket r Panel (FISTRP) & Weapon System Explosive Safety Re	afety notor			
FY 2014 Plans: The prime contractor will continue to develop EAFD/ISD technology community are planned. The bi-annual IM POA&M (for FY15/16) we to participate and collaborate with the ONR HARDKILL effort.					
FY 2015 Plans: The prime contractor will complete development of EAFD/ISD technology community are planned. The IM tech team will continue to page 1.					
Title: Portable All-Up Round Bit Tester (PABTs)	Ai	ticles:	2.700	5.000	1.00
FY 2013 Accomplishments: Integrated Baseline Review (IBR). System Requirements review (S	RR)/System Functional Review (SFR) and detailed design	ın.			
FY 2014 Plans: Continue detailed design and development. Preliminary Design Redevelopment.	view/Critical Design Review (PDR/CDR) and interface				
FY 2015 Plans:					

PE 0604366N: Standard Missile Improvements Navy

UNCLASSIFIED
Page 12 of 19

	UNCLASSIFIED				
Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: M	larch 2014	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604366N / Standard Missile Improvements	_	t (Number/N Standard Mi	lame) ssile 6 Progra	am
B. Accomplishments/Planned Programs (\$ in Millions, Article Q	uantities in Each)		FY 2013	FY 2014	FY 2015
Complete software CDR, test readiness reviews, and 1st article for	final qualification test.				
Title: Naval Integrated Fire Control - Counter Air (NIFC-CA)	Ar	ticles:	7.072 -	5.775 -	2.821 -
FY 2013 Accomplishments: Integration of SM-6 6-DOF (Degrees of freedom) with NIFC-CA federend simulation performance predictions. Successful execution of on CNO directed at-sea Point Mugu Test Center (PMTC) live fire test.	e land-based (WSMR) NIFC-CA live fire test. Execution				
FY 2014 Plans: Execution of Live-Fire NIFC-CA tests at WSMR. Execution of three	at-sea live fire NIFC-CA tests at PMTC.				
FY 2015 Plans: Capabilities and limitations development. Analysis based on federat record.	red 6-DOF and live fire test events to support IFC runs fo	r the			
Title: Future Capability Demonstration	Ar	ticles:		25.477 -	36.563 -
FY 2013 Accomplishments: N/A					
FY 2014 Plans: Land Based Testing to support: Lethality test assessments, captive reliability assessment, AEGIS Systems Requirement Review (SRR)		asks,			
Studies to support: Network element trade study, weapon capability combat system implementation study.	characterization study, inherent sensor capability study,	and			
FY 2015 Plans: Control test vehicle tests at White Sands Missile Range, data collect PDR for ABC, and Combat Systems Integration Test (CSIT). Integrated network, AEGIS, and airborne sensor.					
	Accomplishments/Planned Programs Sub	ototals	23.240	40.366	41.384

PE 0604366N: Standard Missile Improvements Navy

UNCLASSIFIED
Page 13 of 19

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014
1	, ,	- , (umber/Name) ndard Missile 6 Program

C. Other Program Funding Summary (\$ in Millions)

			FY 2015	FY 2015	FY 2015					Cost To	
Line Item	FY 2013	FY 2014	Base	OCO	<u>Total</u>	FY 2016	FY 2017	FY 2018	FY 2019	Complete	Total Cost
 WPN 2234: Standard Missile 	332.535	367.985	445.836	-	445.836	514.449	536.614	584.833	598.848	4,681.676	8,865.621
 Standard Missile: QTY 	89.000	81.000	110.000	-	110.000	125.000	125.000	125.000	125.000	842.000	1,800.000

Remarks

D. Acquisition Strategy

SM-6 Acquisition Strategy signed by OSD AT&L 14 March 2012.

E. Performance Metrics

Accomplishments

- DT Flight Tests at PMRF Jan 11
- OT TRR May 11
- OT Flight Tests at PMRF Jul 11
- LRIP III Option II Contract Award Jul 11
- LRIP IV UCA Contract Award May 12
- FRP Decision April 13
- SM-6 SD&D Contract SPI is currently at 1.00 and CPI is at 1.00
- PRP Flight Test July 13

Upcoming Milestones

- DT/OT DI Jan 14 Sept 14
- Integrated Fire Control (IFC) Apr 12 Jul 16

PE 0604366N: Standard Missile Improvements Navy

UNCLASSIFIED
Page 14 of 19

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name)

PE 0604366N / Standard Missile

Improvements

Project (Number/Name)

3092 I Standard Missile 6 Program

Date: March 2014

Product Developme	nt (\$ in M	illions)		FY 2	2013	FY 2	2014		2015 ise	FY 2		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value o Contrac
Design & Analysis	C/CPIF	RAYTHEON : Tucson, AZ	665.690	13.273	May 2013	11.308	Mar 2014	16.434	Nov 2014	-		16.434	Continuing	Continuing	Continui
Design & Analysis	C/CPFF	JHU/APL : Laurel MD	45.418	0.595	Nov 2012	3.049	Mar 2014	3.000	Nov 2014	-		3.000	-	52.062	-
Design & Analysis	MIPR	MIT/Lin Lab : Lexington, MA	0.550	-		-		-		-		-	-	0.550	-
Design & Analysis	WR	NAWC : China Lake	4.434	0.153	Nov 2012	0.050	Mar 2014	-		-		-	-	4.637	-
Design & Analysis	WR	NSWC : Dahlgren	10.904	0.246	Nov 2012	0.175	Mar 2014	0.200	Nov 2014	-		0.200	-	11.525	-
Design & Analysis	WR	NSWC : Indian Head	3.312	0.250	Nov 2012	0.300	Mar 2014	-		-		-	-	3.862	-
Design & Analysis	WR	NSWC : PHD	9.012	0.220	Nov 2012	0.050	Mar 2014	-		-		-	-	9.282	-
Design & Analysis	WR	NSWC : Crane	1.256	-		-		-		-		-	-	1.256	-
Design & Analysis	MIPR	JSPO : Eglin AFB	24.049	-		-		-		-		-	-	24.049	-
Design & Analysis	C/CPFF	LOCKHEED Martin : Moorestown, NJ	6.074	-		-		-		-		-	-	6.074	-
Design & Analysis	WR	NSWC : Corona	16.559	-		0.100	Mar 2014	-		-		-	-	16.659	-
Design & Analysis	Reqn	ONR : Arlington, VA	5.320	-		-		-		-		-	-	5.320	-
Design & Analysis	Reqn	NRL : Washington, DC	0.090	-		-		-		-		-	-	0.090	-
Design & Analysis	WR	COMPTEVFOR : Norfolk, VA	2.155	-		-		-		-		-	-	2.155	-
Design & Analysis	WR	CARDEROCK : Philadelphia, PA	2.549	-		-		-		-		-	-	2.549	-
Design & Analysis	WR	NSWC : Pt Mugu	0.613	-		-		-		-		-	-	0.613	-
Design & Analysis	C/CPFF	BAE : Rockville, MD	6.446	-		-		-		-		-	-	6.446	-
Design & Analysis	MIPR	ARMY : Redstone	0.050	-		-		-		-		-	-	0.050	-
Design & Analysis	WR	NAWCAD : Pax River, MD	0.392	-		-		-		-		-	-	0.392	-
Design & Analysis	C/CPFF	CORVID : Mooresville, NC	2.900	-		-		-		-		-	-	2.900	-
Design & Analysis	C/CPFF	RNB : Arlington, VA	0.010	-		-		-		-		-	-	0.010	-

PE 0604366N: Standard Missile Improvements Navy

UNCLASSIFIED
Page 15 of 19

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name)

PE 0604366N / Standard Missile

Improvements

Project (Number/Name)

3092 I Standard Missile 6 Program

Date: March 2014

Product Developme	nt (\$ in M	illions)		FY 2	2013	FY 2	2014	FY 2 Ba	2015 ise	FY 2	2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Design & Analysis	WR	SPAWAR : Arlington, VA	0.007	-		-		-		-		-	-	0.007	-
Design & Analysis	WR	ARMY : Cecom	0.066	-		-		-		-		-	-	0.066	-
Design & Analysis	C/FP	GENERAL DYNAMICS : Falls Church, VA	1.660	-		-		-		-		-	-	1.660	-
Design & Analysis	WR	VARIOUS : (IWS 1A)	59.773	-		11.000	Mar 2014	11.000	Nov 2014	-		11.000	-	81.773	-
Design & Analysis	WR	VARIOUS: (VLS)	24.772	0.105	Nov 2012	0.050	Mar 2014	-		-		-	-	24.927	-
Design & Analysis	WR	NSWC : WSMR	0.000	-	Nov 2012	0.100	Mar 2014	-		-		-	-	0.100	-
		Subtotal	894.061	14.842		26.182		30.634		-		30.634	-	-	-

Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY 2	2014		2015 ise		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Develpomental Test & Evaluation	WR	NSWC : Port Hueneme	1.190	0.175	Nov 2012	0.700	Mar 2014	0.500	Nov 2014	-		0.500	-	2.565	-
Develpomental Test & Evaluation	WR	NSWC : WSMR	23.501	0.641	Nov 2012	1.900	Mar 2014	0.250	Nov 2014	-		0.250	-	26.292	-
Develpomental Test & Evaluation	WR	PMRF : Hawaii	38.201	-		-		-		-		-	-	38.201	-
Develpomental Test & Evaluation	WR	NAWC : Pt Mugu	0.769	-		2.000	Mar 2014	2.000	Nov 2014	-		2.000	-	4.769	-
Develpomental Test & Evaluation	C/CPAF	RAYTHEON : Tucson, AZ	15.266	1.841	May 2013	1.854	Mar 2014	1.800	Nov 2014	-		1.800	-	20.761	-
Develpomental Test & Evaluation	C/CPFF	JHU/APL : Laurel, MD	3.748	2.058	Nov 2012	1.630	Mar 2014	1.500	Nov 2014	-		1.500	-	8.936	-
Develpomental Test & Evaluation	WR	NSWC : Corona	3.898	1.200	Nov 2012	1.620	Mar 2014	1.500	Nov 2014	-		1.500	-	8.218	-
Develpomental Test & Evaluation	WR	NSWC : Dahlgren	0.863	0.095	Nov 2012	0.550	Mar 2014	0.500	Nov 2014	-		0.500	-	2.008	-

UNCLASSIFIED

PE 0604366N: Standard Missile Improvements Navy

Page 16 of 19

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Navy Date: March 2014 R-1 Program Element (Number/Name) Project (Number/Name) Appropriation/Budget Activity 1319 / 5 PE 0604366N / Standard Missile 3092 I Standard Missile 6 Program *Improvements* FY 2015 FY 2015 FY 2015 Test and Evaluation (\$ in Millions) FY 2013 FY 2014 Base oco Total Contract Target Method Performing Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location **Years** Cost Date Date Cost Date Cost Date Complete Cost Contract Cost Cost Developmental Test & WR VLS: Arlington, VA 1.555 0.339 Nov 2012 0.150 Mar 2014 0.150 Nov 2014 0.150 2.194 Evaluation Developmental Test & COMPTEVFOR: WR 0.922 0.442 May 2013 1.364 Evaluation Norfolk, Va Developmental Test & WR VARIOUS: (IWS 1A) 0.902 0.500 Nov 2014 0.500 1.402 Evaluation Developmental Test & WR NSWC: Carderock 0.000 2.000 Mar 2014 0.500 Nov 2014 0.500 2.500 Evaluation Subtotal 90.815 6.791 12.404 9.200 9.200 119.210 FY 2015 FY 2015 FY 2015 **Management Services (\$ in Millions)** FY 2013 FY 2014 Base oco Total Contract Target Method **Cost To** Performing Prior Award Award Award Award Total Value of **Cost Category Item** & Type Activity & Location **Years** Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Contractor Engineering C/CPAF **VARIOUS**: Various 23.488 1.563 Nov 2012 1.730 Mar 2014 1.500 Nov 2014 1.500 28.281 Services IWS3: Arlington, VA 1.088 0.044 Nov 2012 0.050 Mar 2014 0.050 Nov 2014 0.050 1.232 Travel Various Not Specified: Not C/FP DAWDF 1.130 1.130 Specified Subtotal 25.706 1.607 1.780 1.550 1.550 30 643 Target FY 2015 FY 2015 Value of Prior FY 2015 Cost To Total Contract FY 2013 FY 2014 oco Years Base Total Complete Cost

Remarks

Navy

PE 0604366N: Standard Missile Improvements

Project Cost Totals

1,010.582

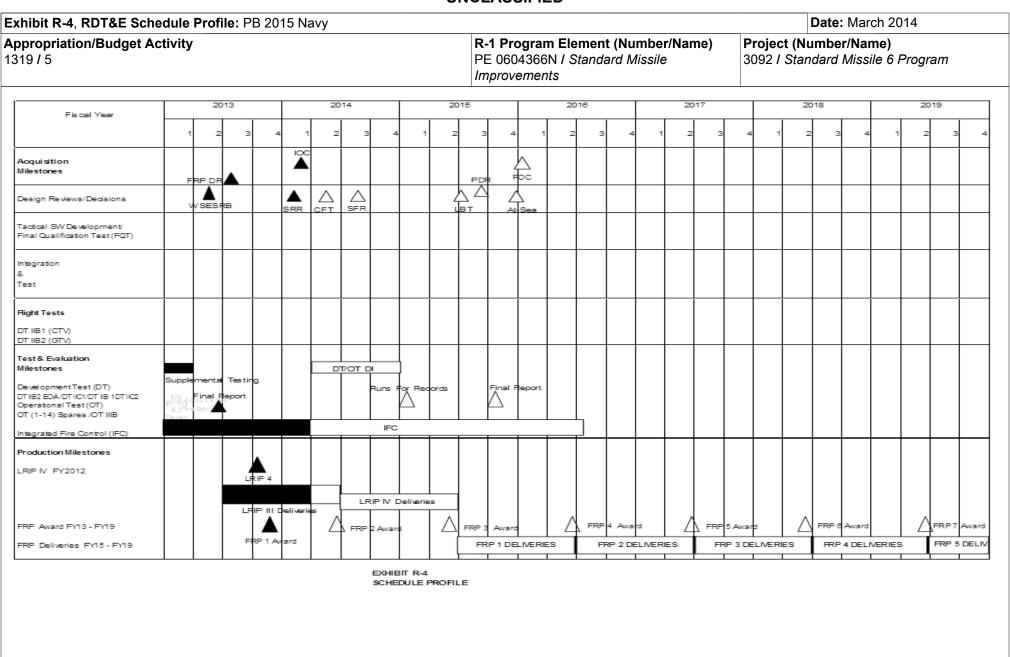
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R-1 Line #108

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PE 0604366N: Standard Missile Improvements Navy

UNCLASSIFIED
Page 18 of 19

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Navy			Date: March 2014
· · · · · · · · · · · · · · · · · · ·	, ,	- 3 (umber/Name) ndard Missile 6 Program

Schedule Details

	Sta	ırt	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 3092				
IOC	1	2014	1	2014
Full-Rate Production (FRP) DAB	3	2013	3	2013
Full Operational Capability (FOC)	4	2015	1	2016
WSESRB	1	2013	2	2013
DT/OT DI (FOT&E)	2	2014	4	2014
Runs for Record Final Report	2	2013	2	2013
Runs for the Record	1	2015	1	2015
Runs for the Record Final Report	4	2015	4	2015
Low-Rate Initial Production III Deliveries	3	2013	2	2014
Low-Rate Initial Production IV Deliveries	3	2014	2	2015
Full Rate Production (FRP) Deliveries	3	2015	4	2019
Full Rate Production (FRP) Award	4	2013	3	2019
Future Capability Demonstration Captive Flight Test (CFT)	2	2014	2	2014
Future Capability Demonstration Base Test (LBT)	3	2015	3	2015
Future Capability Demonstration At-Sea test	4	2015	4	2015
Future Capability Demonstration SRR	1	2014	1	2014
Future Capability Demonstration SFR	3	2014	3	2014
Future Capability Demonstration PDR	3	2015	3	2015
Integrated Fire Control	1	2013	3	2016
Low-Rate Initial Production IV Award	4	2013	4	2013

PE 0604366N: Standard Missile Improvements Navy

UNCLASSIFIED
Page 19 of 19